

ENHANCED PHOSPHOLIPID REDUCTION AND CALCIFICATION MITIGATION OF BIOLOGICAL MATERIALS

ABSTRACT OF THE DISCLOSURE

There is a need in the tissue treatment arts of methods for effectively mitigating calcification, reducing calcification and reducing phospholipid content of implanted bioprosthetic tissues. The invention provides an effective protocol for preparing biological tissue for incorporation as a bioprosthetic device. Disclosed herein is the discovery that calcification of biological tissue is mitigated and phospholipid content is reduced by including a step in the pre-implantation protocol whereby the biological tissue is treated with a surfactant and cross linking agent in the absence of a denaturant. Furthermore, the biological tissues prepared under this protocol are well suited for use in bioprosthetic devices.